



Final Product/Process Change Notification

Document #:FPCN24718X

Issue Date:05 May 2022

Title of Change:	MC100EP140 Datasheet Update
Proposed First Ship date:	12 Aug 2022 or earlier if approved by customer
Contact Information:	Contact your local onsemi Sales Office or Eric.Rupnow@onsemi.com
PCN Samples Contact:	Contact your local onsemi Sales Office. Sample requests are to be submitted no later than 30 days from the date of first notification, Initial PCN or Final PCN, for this change. Samples delivery timing will be subject to request date, sample quantity and special customer packing/label requirements.
Additional Reliability Data:	Contact your local onsemi Sales Office or Joe.Chapple@onsemi.com
Type of Notification:	This is a Final Product/Process Change Notification (FPCN) sent to customers. FPCNs are issued 90 days prior to implementation of the change. onsemi will consider this change accepted, unless an inquiry is made in writing within 30 days of delivery of this notice. To do so, contact PCN.Support@onsemi.com
Marking of Parts/ Traceability of Change:	No Marking Changes
Change Category:	Technical Documentation
Change Sub-Category(s):	Datasheet/Product Doc change

Sites Affected:

onsemi Sites	External Foundry/Subcon Sites
None	None

Description and Purpose:

Update the MC100EP140 Datasheet VOL and VOH limits in the Tables 5 and 6 to match family VOL/VOH specification limits for Output Buffer Design that is used in the MC100EP140 product.

Old Tables

Table 5. 100EP DC CHARACTERISTICS, PECL $V_{CC} = 3.3\text{ V}$, $V_{EE} = 0\text{ V}$ (Note 2)

Symbol	Characteristic	-40°C			25°C			85°C			Unit
		Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	
V_{OH}	Output HIGH Voltage (Note 3)	2155	2280	2405	2155	2280	2405	2155	2280	2405	mV
V_{OL}	Output LOW Voltage (Note 3)	1755	1880	2005	1755	1880	2005	1755	1880	2005	mV

Table 6. 100EP DC CHARACTERISTICS, NECL $V_{CC} = 0\text{ V}$, $V_{EE} = -3.6\text{ V}$ to -3.0 V (Note 4)

Symbol	Characteristic	-40°C			25°C			85°C			Unit
		Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	
V_{OH}	Output HIGH Voltage (Note 5)	-1145	-1020	-895	-1145	-1020	-895	-1145	-1020	-895	mV
V_{OL}	Output LOW Voltage (Note 5)	-1545	-1420	-1295	-1545	-1420	-1295	-1545	-1420	-1295	mV

New Tables

Table 5. 100EP DC CHARACTERISTICS, PECL $V_{CC} = 3.3\text{ V}$, $V_{EE} = 0\text{ V}$ (Note 2)

Symbol	Characteristic	-40°C			25°C			85°C			Unit
		Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	
V_{OH}	Output HIGH Voltage (Note 3)	2225	2350	2475	2275	2400	2525	2300	2425	2550	mV
V_{OL}	Output LOW Voltage (Note 3)	1775	1900	2025	1800	1925	2050	1825	1950	2075	mV

Table 6. 100EP DC CHARACTERISTICS, NECL $V_{CC} = 0$ V, $V_{EE} = -3.6$ V to -3.0 V (Note 4)

Symbol	Characteristic	-40°C			25°C			85°C			Unit
		Min	Typ	Max	Min	Typ	Max	Min	Typ	Max	
V_{OH}	Output HIGH Voltage (Note 5)	-1075	-950	-825	-1025	-900	-775	-1000	-875	-750	mV
V_{OL}	Output LOW Voltage (Note 5)	-1525	-1400	-1275	-1500	-1375	-1250	-1475	-1350	-1225	mV

The change will not impact form, fit, or function of product.

Reliability Data Summary:

Not applicable.

Electrical Characteristics Summary:

Not applicable.

List of Affected Parts:

Note: Only the standard (off the shelf) part numbers are listed in the parts list. Any custom parts affected by this PCN are shown in the customer specific PCN addendum in the PCN email notification, or on the [PCN Customized Portal](#).

Part Number	Qualification Vehicle
MC100EP140DR2G	N/A
MC100EP140DG	N/A